

Influence of admixture of cellulose nitrate on the properties of acetate films. I. O. Goldberg and L. A. Krasil'son. *Vestn. Krasnoyarsk. Polz. S. S. R.* 1953, No. 6, p. 27.
The bases made of cellulose nitrate contain about 10% cellulose more resistant than pure cellulose, and therefore are very stable and flexible. The experiments have shown that the best results are obtained when the cellulose nitrate contains 10% cellulose mixed base as an additive product and is obtained from the swelling of the pure nitrate and its conversion. The rate of burning is a linear function of the cellulose nitrate content in the base, but it is very dependent on the nature of the plasticizer used. The time of decomposition const. through the range of 100-300°C. is 0.6 hr. For compns. of 40% and below, it increases in proportion to the extent of the cellulose nitrate content. Bases containing less than 30% of cellulose nitrate do not spontaneously catch fire in the presence of oxygen at 200°C. even when no writer is applied. — C. T. F. M.

ASH-ELA METALLURGICAL LITERATURE CLASSIFICATION

E2

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES 2001

The composition of cellulose nitrate films. F. S. Neiman and A. Yu. Gindman. *Kinofotokhim. Prom.* 6, No. 7, 20-34(1910). S. and G. compare the components of Soviet, Agfa and du Pont films. The different components of the films are detd. as follows: Cellulose nitrate is pptd. in H₂O from a 5% acetone soln. Then the plasticizer is removed with a mixt. of EtOH and petr. ether and the residue dried to const. wt. The camphor is detd. by Zueva's method (*C. A.*, 35, 2469) by dissolving the base in a pure alc. soln. of NaOH, distn. of the camphor and pptn. as the di-nitrophenylhydrazone. The residual solvent is not detd. by the usual boiling of the film base in H₂O and distn. of the solvents, because this also removes the camphor and high-boiling ales. S. and G. suggest, instead, plotting curves of the loss of wt. by drying and detn. of the alc.-H₂O moisture by A. A. Schmidt's method using CaCl₂ in a very small space to absorb alc. and H₂O but not acetone and acetates. The amt. of cellulose nitrate and N found in du Pont and Agfa films was much greater than the corresponding amts. in Soviet films. The stability of all films was within permissible limits. The ash content of du Pont and Agfa films was generally lower than that of Soviet films. The viscosity of Agfa film was the same as that of film made in Soviet factory No. 5 but higher than that of films made by du Pont and Soviet factory No. 6. The polydispersion of foreign films was much lower than that of Soviet films, but this is probably due to the higher quality of the filters and the more perfect production methods of the former.

W. R. Eichler

ATA-SLA METALLURGICAL LITERATURE CLASSIFICATION

SEARCHED	SERIALIZED	INDEXED	FILED	CLASSIFICATION		VOLUME NUMBER		QUALITY ONE ONE		SEARCHED	SERIALIZED	INDEXED	FILED	
				1	2	3	4	5	6					

Chern, S. I.

Chern, S. I.

Subject: "Synthesis of the Stability of Various Derivatives of Cellulose
and Products of Partial Heterogeneous Saponification."

To: Chern, S. I.

All-Russian Inst of Organic Polym.

SO Vecheryaya Moskva
Sum 71

CA

Heterogeneous hydrolysis of triacetylcellulose. I.²⁹
Sternikov, V. O., Goldstein, Ame, Plotnikov, G., Moscow
23rd Tr. Akad. Nauk SSSR Applied Chem., 25, 84-91 (1962).
Partial hydrolysis of cellulose triacetate by NH_4NO_2 at room
temp causes a significant depolymerization of the sub-
strate. The product obtained from the production type of
fibrous acetate made in U.S.S.R. is not completely sol-
uble in Me_2CO . The hydrolysis is carried out with 1 part NH_4NO_2 in
 H_2O and runs up to 96 hrs duration showed that most
of the reaction occurs within 72 hrs. The viscosity of the
product changes very little during the reaction. The prod-
uct can be reacetylated and the process repeated several
times without appreciable change in viscosity or degree of
polymerization. Products with 55.8% acetate groups
will very considerably in acetone and dissolve in part
of the oil part is impossible by the technique used
by solvent extr.

23

CA

Solubility of acetylcellulose in acetone. P. V. Koglov and E. S. Sherman, *Zhur. Priklad. Khim.* (J. Applied Chem.) 25: 181-91 (1952). -Cellulose acetates with 32-85% Ac groups prep'd. by homo- and heterogeneous conditions of acetylation and subsequent hydrolysis were examd. as to their solv. in Me₂CO. The solv. is detd. largely by the mol wt. (i.e., extent of polymerization). Secondary acetates, prep'd. by homogeneous esterification and hydrolysis, show lower than normal mol. wt. owing to depolymerization and, hence, higher solv. Products formed in heterogeneous conditions under mild conditions show only partial solv. owing to the presence of varying amts. of low-mol. wt. products. Their depolymerization causes appearance of complete solv. in Me₂CO. Results are cited for numerous grades of native (U.S.S.R.) and imported cellulose acetates. G. M. K.

SHERMAN, F. S.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Cellulose and Paper

✓ Solubility of acetylcellulose in acetone. P. V. Kozlov
and F. S. Sherman, *J. Appl. Chem. U.S.S.R.* 23, 421-0
(1952) (Engl. translation).--See C.I. 46, 7325g.

H. L. H.

SUMARIN, A. S., VITOV, I. I.

Cellulose triacetate

Heterogeneous hydrolysis of cellulose triacetate. Zhur. prikl. khim. 26 no. 1 (1952)
Vsesoyuznyj Nauchno-Issledovatel'skiy
Kino-robot Institut. Moskva

Monthly List of Russian Accessions, Library of Congress, August, 1952. UNCLASSIFIED.

SHERMAN, F. S.

Solubility of fibrous cellulose triacetate and products of its partial heterogeneous saponifications in mixtures of methylene chloride with alcohols. F. S. Sherman and P. V. Kozlov. *J. Appl. Chem. U.S.S.R.* 10, 185-190 (1953) (Engl. translation).—See C.A. 47, 10839t. H. L. H.

SHERMAN, F.S.; KOZLOV, P.V.

Solubility of fibrous cellulose triacetate and products of its partial heterogeneous saponification in mixture and methylene chloride with alcohols.
Zhur. Priklad. Khim. 26, 524-31 '53. (MLRA 6:5)
(CA 47 no.20:10839 '53)

SHERKMAN, F.S.

*Photo
check*

U1728* (Russian.) Physico-Chemical Properties of Triacetate Movie Film and Film Bases at Elevated Temperatures. Fiziko-mekhanicheskie svoistva triacetatnoi kinoplenki i osnovy pri povyshennykh temperaturakh. F. S. Sherman, B. N. Korostylev, and I. M. Fridman. Tekhnika Kino i Televideniia, no. 2, Feb. 1957, p. 54-58. *5*

Tear resistance of triacetate film materials decreases with rising temperature to a greater extent than that of film materials based on nitrocellulose.

Dm *will do*

AUTHOR:

Sherman, F.S.

SOV 77-3-4-18/23

TITLE:

New Synthetic Materials as a Base for Photographic Films
(Novyye sinteticheskiye materialy dlya osnovy fotograficheskikh plenok)

PERIODICAL:

Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, 1958,
Vol 3, Nr 4, pp 295-299 (USSR)

ABSTRACT:

The article deals with the process of using polycarbonates as backing material for films, developed and put into practice by the "Farbenfabriken Bayer", GFR. Chemical formulae for the polycarbonates used are listed and the physical properties of films using the various polymers are presented in tabular form. There are 3 tables and 5 references, 1 of which is Soviet, 1 German and 3 English.

1. Photographic films--Materials 2. Carbonates--Applications
3. Polymers--Applications

Card 1/1

S/187/63/000/002/001/004
A004/A126

AUTHORS: Timofeyeva, V. G., Sherman, F. S., Podgorodetskiy, Ye. K.

TITLE: Investigating relaxation processes in triacetate films

PERIODICAL: Tekhnika kino i televideniya, no. 2, 1963, 21 - 26

TEXT: The authors investigated the relaxation in nonplasticized cellulose acetate films with different contents of combined acetic acid and at different degrees of tension and temperature. It was found that the cellulose acetate composition affects the relaxation process. The higher the amount of hydroxyl groups in the cellulose acetate, the more difficult is the relaxation process. Then the relaxation process in plasticized films of partially saponified cellulose triacetate was studied at different temperatures and tensions. It was found that the type of plasticizer added to the film affects its macrostructure. Plasticizers of low activity result in a greater reduction in tension under temperature effects than do films without plasticizers. If active plasticizers are added to the film composition, inner stresses resulting from heating due to the effect of loads are more easily removed. Such a film, after relieving the stresses, is in an equilibrium state and is subjected to a minimum shrinkage after watering. To produce

Card 1/2 .

Investigating relaxation processes in...

S/187/63/CC0/002/CC1/004
A004/A126

film bases with such properties, the drying portion of the casting machine should be equipped with devices allowing accurate control of the base tension. Besides, it is necessary to increase the temperature in the final zones of the drying portion of the casting machine up to 120°C. There are 4 figures and 3 tables.

Card 2/2

ZELIKMAN, V.L.; SHERMAN, F.S.; DMITRIYEVA, V.A.; KONDRAT'YEVA, Ye.B.

Use of the diffusometric method for determining the sharpness of the photographic image in the manufacturing technology of thin-layer motion-picture films. Usp.nauch.fot. 10:221-229 '64.

(MIRA 17:10)

SHERMAN, G. I.

FA 55/49137

USER/Electricity

Generators
Saturation Curves

May 49

"Determination of the Operational Characteristics of Synchronous Generators, Allowing for Saturation," G. I. Sherman, Cand. Tech Sci., 4 pp

"Elektrichesvo" No 5

Describes shortcomings of Potier, Crary, and other methods of determining saturation curves of synchronous generators. Operating diagrams for synchronous generators have been insufficiently developed to date. Considers in some detail

55/49137

USER/Electricity (Contd)

May 49

the coefficient of saturation and operating diagrams. Submitted 7 Aug 48.

55/49137

SHERMAN, I.

Unsolved problems of transportation law. Rech. transp. 20 no.5:
14-16 My '61. (MIRA 14:5)

1. Glavnny yuriskonsul't Kamskogo rechnogo parokhodstva.
(Inland water transportation—Law and legislation)

SHEVCHENKO, N.F.; SHERMAN, I.L.; MUZYCHENKO, S.V.; SHEVCHENKO, M.G.,
tekhn.red.

[Results of the socialist development of the Ukraine in the
first ten years of Soviet rule] Itogi pervogo desiatiletija
sotsialisticheskogo stroitel'stva na Ukraine. Khar'kov,
Khar'kovskoe obl.izd-vo, 1957. 105 p. (MIRA 12:12)
(Ukraine--Economic conditions)

SHERMAN, I.Ye.; GRIGOR'YEV, V.N.

Small-scale mechanization in the woodworking shop. Der. prom. 6
(MIRA 10:11)
no.10:23-24 O '57.

1. Leningradskiy vagonostroitel'nyy zavod im. I.Ye. Yegorova.
(Railroads--Cars--Construction) (Woodwork)

SHERMAN, I.Ye.; TIMOSHENKO, Ye.Ye.

Efficient method for making moldings. Der.prom.6 no.12:24-25
D '57. (MIRA 10:12)
(Woodworking machinery)

28-58-2-47/41

AUTHORS: Timoshenko, Ye.Ye., and Sherpan, I.Ye., Engineers

TITLE: More Precise Specifications for the Standard for Wooden Parts of Railway Cars (Уточнение в standartu na derevyanyye detalii zheleznodorozhnykh vozokov)

PERIODICAL: Standartizatsiya, 1958, Nr 4, p 61 (УоСи)

ABSTRACT: Amendments are suggested to the "GOST 5191-53" standard for wooden parts of wide-track RR-cars. The amendments concern the working of the rules for wood insets (in spots where knots are taken out); the specifications of plywood and wood panels; the surface finish for soaking with antiseptic paste "Vagonka".

ASSOCIATION: Zavod imeni Yegorova (Plant imeni Yegorov)

AVAILABLE: Library of Congress

Card 1/1 1. Railway cars-Construction-Standards 2. Standardization-USSR

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001549120005-4

SHERMAN, I.Ye.

Cone shaping of parts on a machine with conveying belts. Der.prom.
8 no.4:23 Ap '59. (MIRn 12:6)
(Woodwork)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001549120005-4"

SHERMAN, Ye.Ye.; SHERMAN, I.Ye.

Machine for priming and painting wood parts. Der. prom. 8 no.9:
26-27 S '59. (MIRA 12:12)
(Wood finishing)

SHERMAN, I.Ye., inzh.

Drills with circular undercutters. Der.prom. 9 no.2:24
F '60. (MIRA 13:6)
(Drilling and boring machinery)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001549120005-4

SHERMAN, I.Ye.

Drill for deep drilling with simultaneous countersinking, Der.
prom. 13 no.7:28 Jl '64. (MIRA 17:11)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001549120005-4"

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001549120005-4

Im. Kirova, L.Ye.

vezd'yan ruse cutler ema dmili. Der.prom. 14 no.311-6-6-5.
(Vika 19:12)
L. leningradskiy vagonosvoitelskyy zavod im. Yegorova.

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001549120005-4"

PEREL'MAN, L.B.;CHLENOV, L.G.;SHERMAN, L.M.

Temporary ligation of the neuro-vascular bundle of the temporal region as
a form of reflex therapy of central cerebral disorders in hypertension.
Klin. med., Moskva 30 no.9:81-89 Sept 1952. (GLML 23:2)

1. Doctor Medical Sciences for Perel'man; Professor for Chlenov. 2. Of
the Institute of Neurology of the Academy of Medical Sciences USSR (Direc-
tor -- Prof. N. V. Konovalov, Active Member AMS USSR).

SHERMAN, L.M.

ZHIMUNSKAYA, Ye.A.; SHERMAN, L.M.

Electrical activity of the brain in hypertension during provisional ligature of the neurovascular bundle of the temporal lobe. Klin. med. 32 no.7:37-42 J1 '54. (MLRA 7:8)

1. Iz Instituta nevrologii (dir.-deystvitel'nyy chlen AMN SSSR prof. N.V.Konovalov) Akademii Meditsinskikh nauk SSSR.

(HYPERTENSION

EEG after temporary interruption of neurovasc. bundle of temporal lobe)

(TEMPORAL LOBE

temporary interruption of neurovasc. bundle, eff. of EEG in hypertension)

(ELECTROENCEPHALOGRAPHY, in various diseases

hypertension, eff. of temporary interruption of neurovasc. bundle of temporal lobe)

RUDERMAN, A.I.; SHERMAN, L.M.

Clinical roentgenologic investigations of the efficacy of a temporary ligation of the neurovascular bundle of the temporal region in gastric and duodenal ulcer. Biul. eksp. biol. i med. 37 no.4:30-34 Ap '54.

(MLRA 7:7)

1. Iz rentgenodiagnosticheskogo etdeleniya (zav. prof. I.A.Shekter) TSentral'nogo nauchno-issledovatel'skogo instituta rentgenologii i radiologii imeni V.M.Molotova (dir. prof. P.D.Yal'tsev)
(PEPTIC ULCER, surgery,
*temporary neuro-vasc. ligation of temporal region)

SHERMAN L.M., Surg. 1955, 33/3 ('i)

2737. SHERMAN L.M. Hosp. Medpiyavka. *Temporary ligation of the neurovascular bundle of the occipital region as a useful procedure in the 'reflex' therapy of varicose ulcers of the leg (Russian text) KLIN. MED. (Mosk.) 1955, 33/3 ('i)

Phlogistic manifestations of varicose veins with thrombophlebitis complications can well bring about irritation of the CNS with a re-awakening of pathological reactions that translate themselves into ulcerations. Basing himself on the fact that varicose ulcers may be reactivated by means of a complex reflex action, the author has conceived a method consisting of a reflex generating therapy by means of a temporary ligation of the neurovascular bundle of the occipital region. The author has observed 15 cases undergoing ambulatory treatment for a period of 2 to 10 yr. Eleven patients were afflicted with chronic thrombophlebitis of superficial veins, while in 4 the deep veins were involved. Favourable results with this therapy included 11 out of 15 patients treated over a period of 10-14 days. Complete disappearance of the varicose ulcers and the pain occurred in 8; in 4 the period of follow-up was 16 months, and in 4, about 2-10 months. In 3 cases the ulcers did not heal completely, and in 4, the therapy proved useless. The author has noted a rise in superficial temperature of 0.2 to 8° in cases undergoing this form of therapy. On the positive side of the method is first of all its simplicity of execution without interrupting the work or other activities of the patients.

Parenti - Ferrara

RUDERMAN, A.I.; ZAYRAT'YANTS, V.B.; SHERMAN, L.M.

Weakening of local radiation reactions. Med.rad. 1 no.6:61-65
N-D '56. (MLRA 10:2)

1. Iz rentgenoterapevticheskogo (rukovoditel' - prof. L.D.Podlyashchuk) i patomorfologicheskogo (rukovoditel' - chlen-korrespondent AMN SSSR zasluzhennyy deyatel' nauki prof. B.N.Mogil'nitskiy) otdeleniy Gosudarstvennogo nauchno-issledovatel'skogo instituta rentgenologii i radiologii imeni V.M.Molotova.

(RADIATION, inj. eff.
ionizing radiations causing wds. in white rats, eff. of ligatures on healing)

(WOUNDS AND INURIES, exper.
induced by ionizing radiations in white rats, eff. of ligatures on healing)

BALABAN, I.M., inzhener; FRENKEL', P.M., inzhener; SHERMAN, L.N., arkhitekt

Bearing structures of industrial buildings having roofs made of
corrugated asbestos cement slabs. Stroi.prom.25 no.1:9-11 Ja'47.
(MLRA 8:12)

1. Promstroyprojekt
(Structural frames) (Roofs)

ANDRES, L.M., inzhener; SOKOLOV, P.N., inzhener; SHERMAN, L.N., arkitekt

Selecting optimum parameters for corrugated asbestos cement slabs
used for walls and roofs of buildings and structures. Stroi.prom.
25 no.1:13-15 Ja'47. (MLRA 8:12)

1. Promstroyproyekt (for Andres and Sherman).
(Asbestos cement) (Walls)

SHERMAN, L.N., laureat Stalinskoy premii, arkitektor; OVSYANKIN,
V.I., laureat Stalinskoy premii, arkitektor; FRENKEL',
P.M., inzhener; PERSON, M.N., tekhnicheskiy redaktor.

[Asbestos cement enclosure sheets for industrial buildings]
Ograzhdaiushchie konstruktsii iz asbestotsementnykh listov
dlia promyshlennyykh zdanii. Moskva, Gos. izd-vo lit-ry po
stroitel'stvu i arkitekture, 1952. 326 p. [Microfilm]
(Asbestos cement) (MLRA 7:12)

AID P - 515

Subject : USSR/Engineering
Card 1/1 Pub. 93 - 2/12
Author : Sherman, L. N., architect, Recipient of Stalin Prize
Title : Construction of machine and tractor repair shops for
machine and tractor service stations
Periodical : Sbor. mat. o nov. tekhn. v stroi., 6, 3-8, 1954
Abstract : A master plan and construction details of repair shops
for MTS are described. The plan was worked out by the
State Institute for the Planning of Agricultural Con-
struction. 5 diagrams.
Institution : None
Submitted : No date

SHERMAN, L.N., arkhitektor, laureat Stalinskoy premii.

Mass production plans for machine-tractor station buildings.
Stroi.prom.32 no.1:4-9 Ja '54. (MLRA 7:2)

1. Promstroyprojekt. (Buildings, Prefabricated)
(Machine-tractor stations)

BORISHANSKIY,M.S., kandidat tekhnicheskikh nauk; GVOZDEV,A.A., professor,
doktor tekhnicheskikh nauk; MIZERNYUK,B.N., inzhener; NIKITIN,N.V.,
inzhener; SHERMAN,L.N., arkhitektor

Precast reinforced concrete beams developed by the State Planning
Institute of Industrial Construction and the Central Scientific
Research Institute of Industrial Construction. Rats. i izobr.
predl. v stroi. no.81:20-22 '54. (MIRA 8:6)
(Girders) (Precast concrete construction)

SHERMAN, L.N., arkhitektor, laureat Stalinskoy premii.

Zero-load fixing of external columns and walls to separated axes
of a building. Stroi. prom. 33 no.9:27-29 S '55. (MLRA 9:1)

1. Promstroyproyekt.
(Structural frames)

SHERMAN, L.N. arkitektor.

Skylights with supporting glass panels. Stroi. prom. 36 no.1:20-24
Ja '58. (MIRA 11:1)
(Skylights)

SHCHIPAKIN, L.N.; SHERMAN, L.N.

Marking foundations for sinking sectional piles. Stroi. prom. 36 no.1:
43-44 Ja '58. (MIRA 11:1)
(Foundations) (Pile driving)

SHERMAN, L.I., -arkhitektor

Experimental plan for redesigning the auxiliary areas of a
foundry. Piem. stroi. 39 no.7:33-35 '61. (MIRA 14:7)

1. TSentral'nyy nauchno-issledovatel'skiy i proyektno-eksperimental'nyy
institut promyshlennykh zdaniy i sooruzheniy.
(Foundries)

SHERMAN, L.H.

Welfare and cultural services at industrial enterprises. Prom.stroi.
40 no.6:24-28 '62. (MIRA 15:6)

1. TSentral'nyy nauchno-issledovatel'skiy i proyektno-eksperimental'nyy institut promyshlennyykh zdaniy i sooruzheniy.
(Employees' buildings and facilities)

SMIRNOV, V.P., inzh., red.; SHERMAN, L.N., arkh., red.

[Construction specifications and regulations] Stroitel'nye normy i pravila. Moskva, Gosstroizdat. Pt.2. Sec.M.ch.3. [Auxiliary buildings and installations for industrial enterprises; specifications for planning] Vspomogatel'nye zdanija i pomeshcheniya promyshlennyykh predpriatii; normy proektirovaniia (SNiP II-M. 3062). 1963. 21 p. (MIRA 17:3)

1. Russiia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva. 2. Gosstroy SSSR (for Smirnov). 3. Tsentral'nyy nauchno-issledovatel'skiy i proyektno-eksperimental'nyy institut promyshlennyykh zdanii i sooruzhenii (for Sherman).

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001549120005-4

CHUPRINOV, A. V., KALAIK VENK. I., ALEKSEEV, S. A., BILAEV, T. G., BILAEV, V.,
IV. I., BALK, V. I., STAVISKY, Yu. Y., STURZIK, Z. A. and SHETIAN, L. Ye.

"Effective Cross-Section Measurements of Fast Neutron Radiation Capture."

paper 1 - presented at 2nd UN Intl. Conf. on the peaceful uses of Atomic
Energy, Geneva, 1 - 13, Sept 5th.

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001549120005-4"

89-1-16/29

AUTHOR: Sherman, L. Ye.

TITLE: Determination of the Reaction Cross Section $U^{238}(n,2n) U^{237}$
(Izmereniye sechenija reaktsii $U^{238} (n,2n) U^{237}$)

PERIODICAL: Atomnaya Energiya, 1958, Vol. 4, Nr 1, pp. 87-88 (USSR)

ABSTRACT: By means of a 4π -counting tube the absolute number of β -decay of U^{237} was determined and herefrom the σ -value for the reaction $U^{238} (n,2n) U^{237}$ was determined at $11,24 \pm 1,70$ mb. The uranium sample was irradiated with fast neutrons. There are 2 references, 1 of which is Slavic.

SUBMITTED: August 28, 1957

AVAILABLE: Library of Congress

Card 1/1

30W AG. - 15
MAY, 1978.

AUTHORS: Leypunskiy, A. I., Abramov, A. I., Andreyev, V. N., Kostylev, V. I., L'vov, V. I., Soudarenko, I. I., Gal'kov, V. I., Golubcov, V. I., Goryainov, V. I., Kravchenko, A. G., Kostichkovsky, O. S., Kostylev, V. I., Kuz'manov, B. D., Morozov, V. N., Neklyudov, M. M., Savchenko, G. M., Sivashinsky, Yu. I., Ustinovskiy, G. M., Yushkov, M. I., Zverev, L. V., Yuzenkov, L. N., Yeflov, M. I., Zverev, L. V.

TITLE: Investigations of the Physics of Reactors with Fast Neutrons. II
(Kazakhstan's Institute of Nuclear Physics)
(Continued from abstract 6/15)

PUBLICATIONAL:

ABSTRACT: The reactivity and the kinetics of the reactor were examined. It could be shown that in the center of the active zone the weight of the 5 MeV neutrons is higher by 10% than that of 250 keV neutrons. The effective yield of the delayed neutrons in the reactor with a uranium shield exceeds that of a reactor with a copper shield by 1.4 times its size.

Reactor #1
The active plutonium zone is the same as in reactor Bt-1. In the center of the reactor a water-uranium channel is provided, which is separated from the plutonium zone by a uranium layer.

Card 1/8

of 6 cm thickness. The uranium lattice consists of cylindrical rods of boron-doped uranium which have a diameter of 35 mm. The damping material is aluminum. The ratio between reactor and uranium is 0.75. The lattice spacing is 40 mm. Measurements carried out with the water-uranium lattice instead of with the pure uranium layer showed:
 1) The conversion factor is reduced from 2.45 ± 0.10 to 1.7 ± 0.2 .
 2) In the case of a fixed power output of the active zone the velocity with which the total quantity of plutonium 239 and uranium 235 is forced was increased by 5%.
 3) The velocity with which plutonium is produced increases 1.6 times its amount.
 4) In the case of a fixed power output of the active zone the total power output of the reactor is increased by 2.2 times its amount.

Reactor #2
This reactor was described more in detail in references 1 and 13. Its nominal power output is 120 kWh, the maximum output is 200 kWh. In the active zone of the reactor Bt-2, which consists of plutonium rods, mercury is used as a coolant, which is fed up

at 17% of the total volume of the active zone. The fueling rods (interior of shield) are made from a copper-nickel alloy. The external shield consists of uranium alloy canned with stainless steel. Thickness ~5 cm. The uranium shield is surrounded by copper of 13 cm thickness. The presence of mercury in the active zone leads to an increase of the content of fast neutrons in the spectrum. The conversion factor was 1.6 ± 0.2 . Theoretically the kinetic equation for this reactor was calculated by G. I. Marchuk according to the method developed by V. S. Vlasov. Theoretical calculation of the critical mass was carried out with an error of 4%, and that of individual rods with an error of 6%. The effective yield of the individual rods was found to amount to 1.7%, while the delayed neutrons while the average value was 0.24 ± 0.04 . There are 7 figures, 1 table, and 15 references, 9 of which are cited.

Card 2/8

Card 3/8

21(0) 1973 I BOOK INFORMATION 07/20/86

International Conference on the Biological Uses of Atomic Energy, 2d. Geneva, 1958
Nucleic acid synthesis; radiation biology; radiobiology; (Proceedings of Soviet Scientists' Nuclear Physics) Moscow, Academy of Sciences of the Soviet Union, 1959. \$52.50.
8,000 copies printed.

Ms. (Title page) A.I. Al'tshuler, Academician V.G. Vereshchagin, Academician and
R.A. Vinogradov, Candidate of Physical and Mathematical Sciences; Ed. of this
volume S.V. Bondarenko and B.P. Savchenko; Candidates of Physical and Mathematical
Sciences; M. (Title page) G.I. Polyansky Tech. Ed.; N.S. Pashal.

NOTES: This collection of articles is intended for scientific research workers
and other persons interested in nuclear physics. The volume contains 15 papers presented
by Soviet scientists at the Second Conference on Practical Uses of
Atomic Energy, held in Geneva in September 1958.

CONTENTS: It is divided into two parts. Part I contains 17 papers dealing with
plasma physics and controlled thermonuclear reactions, and Part II contains 26
papers on nuclear physics, including problems of variable acceleration and of
nuclear fission. The first paper by L.A. Aronovitch presents a review of
the present state of the theory of nuclear fission. The remaining papers in
Part I deal with particular problems in this field.

Part II deals in detail with various problems in nuclear physics, such as:
the fission of heavy atoms and their isotopes, and with the study of
the interaction of artificial earth satellites and rockets, described
in a paper by G.S. Sosulin; the interaction of particles with the atmosphere; the proceedings of the
conference to be published in 15 volumes. The first 6 volume contains all the
papers presented by Soviet scientists at Volume (1), Tadzhikistan
(Nuclear Physics); Volume (2), Kazakhstan; Volume (3), Turkmenia;
Volume (4), Uzbekistan; Volume (5), Tajikistan; Volume (6), Kyrgyzstan;
Volume (7), Belorussian Soviet Socialist Republic; Volume (8), Baltic States;
Volume (9), Central Institute of Mathematics and of Radiation Research
of the USSR; Volume (10), Institute of Mathematics and of Radiobiology
(Radiobiology); Volume (11), Institute of Nuclear Physics; Volume (12), Institute of
Radiation Medicine; Volume (13), Institute of Nuclear Physics; Volume (14), Institute
of Nuclear Physics; Volume (15), Institute of Nuclear Physics. The present volume
is the continuation of the Conference on the Biological and Medical Applications of the
principles of quantum mechanics in the field of nuclear energy. The present
volume contains 10 papers, some of which were previously published in
various Soviet and foreign periodicals. The other 10 volumes contain additional papers
and are to be published later.

The present volume is the continuation of the Conference on the
principles of quantum mechanics in the field of nuclear energy. The present
volume contains 10 papers, some of which were previously published in
various Soviet and foreign periodicals. The other 10 volumes contain additional papers
and are to be published later.

REPORT OR COMMENT: _____

07/20/86

Reports of Soviet Scientists' Nuclear (Cont.)

Report 229: and A.T. Chubarev, Comissar Ray Sosulin is the USSR by means
of Nuclear and Space (Report 229).
Proceedings mentioned include A.I. Al'tshuler, V.G. Vereshchagin, P.V. Vinogradov,
R.A. Vinogradov, V.I. Bondarenko, and B.P. Savchenko; Candidates of
Physical and Mathematical Sciences; M. (Title page) G.I. Polyansky, Tech. Ed.;
N.S. Pashal.

REPORT OR COMMENT: _____

07/20/86

Reports of Soviet Scientists' Nuclear (Cont.)

Report 230: I.V. A.M. Shuster, V.I. Bondarenko, and V.I. Savchenko; Report
of Nuclear Institute Optics of Soviet Institute and Distribution of
Scientific Works (Report 230).

REPORT OR COMMENT: _____

07/20/86

Report 231: A.I. Al'tshuler, O.M. Gordeev, Yu.P. Orlenev, V.L. Egorov,
E.N. Grigor'ev, R.I. Dzhurav, A.V. Gol'denblat, O.I. Kostylev, V.L. Kostylev,
N.S. Kostylev, T.N. Krugly, T.E. Kuznetsov, V.I. Polozov, V.I. Prokhorov,
V.I. Rabinovich, V.I. Sushkov, P.A. Tikhonov, and V. V. Vinogradov; Study of
Surface Effects on Earth Satellites (Report 231)

REPORT OR COMMENT: _____

07/20/86

Report 232: Reports of Cross Sections for Party Activities (Report 229)

REPORT OR COMMENT: _____

07/20/86

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001549120005-4

TOLSTIKOV, V.A.; SHERMAN, L.Ye.; STAVISSKIY, Yu.Ya.

Measuring the capture cross sections of 5-200 Kev. neutrons for U^{238}
and Th^{232} . Atom. energ. 15 no.5:414-415 N '63. (MIRA 16:12)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001549120005-4"

L 1926-66 EWT(m)/EPF(n)-2/T/EWP(t)/EWP(b)/EWA(m)-2 IJP(c) JD/WW/JG/DM

ACCESSION NR: AP5023774

UR/0089/65/019/003/0292/0294

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AUTHOR: Stavisskiy, Yu. Ya.; Sherman, L. Ye.

TITLE: Propagation of resonance-energy neutrons in uranium

SOURCE: Atomnaya energiya, v. 19, no. 3, 1965, 292-294

TOPIC TAGS: neutron spectrum, neutron capture, uranium, fission cross section, capture cross section

ABSTRACT: The propagation of neutrons decelerated in large thicknesses of copper through depleted metallic uranium was studied. During the experiment, the capture cross sections of several elements (Mn^{55} , In^{115} , I^{127} , Au^{197} , U^{238} , U^{235}) were determined relative to the fission cross section of Pu^{239} from the neutron spectrum formed. The measurements were made in a cavity of the uranium lump and by transmission in a spherical geometry. The integral characteristics of the established spectrum are found to be equal to

$$\frac{\sigma_f(U^{238})}{\sigma_f(U^{235})} = 376 \pm 25 \quad \text{and} \quad \frac{\sigma_c(U^{238})}{\sigma_c(Au^{197})} = 2.74 \pm 0.12.$$

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ACCESSION NR: AP5023774

The lower value of $\frac{\sigma_f(U^{238})}{\sigma_c(Au^{197})}$ indicates that the neutron spectrum formed in this case is appreciably softer. In general, the spectrum established in metallic uranium is found to be dependent (at least for the thickness employed in practice) on the neutron spectrum of the source. The criterion for the establishment of an asymptotic spectrum with definite characteristics (constancy of the cross section ratio $\frac{\sigma_f(U^{238})}{\sigma_c(U^{238})}$) cannot be considered final, since this ratio is sensitive mainly to the hard region of the spectrum. "In conclusion, the authors thank M. N. Nikolayev for useful comments and the staff attending the BR-1 reactor for assistance." Orig. art. has: 1 figure and 1 table.

ASSOCIATION: none

SUBMITTED: 21Jan65

ENCL: 00

SUB CODE: NP

NO REF Sov: 003

OTHER: 002

2/2

SHERMAN, M.E., inzh.

Methods for computing the volume of production and measuring
labor productivity in construction. Trudy TSMIIS no. 34:51-106
'60. (MIRA 13:8)

(Productivity accounting)
(Building--Estimates)

SHERMAN, M.E., starshiy nauchnyy sotrudnik

Improve the index of fulfilling the plan. Transp.stroi. 12
no.10:34-36 0 '62. (MIRA 15:12)

1. Otdeleniye ekonomiki Vsesoyuznogo nauchno-issledovatel'skogo
instituta transportnogo stroitel'stva Ministerstva transportnogo
stroitel'stva.

(Construction industry--Accounting)

b. - m. n. d. 14, 17.

USSR/Chemical Technology. Chemical Products and their Application. J-12
Glass. Ceramics. Building Materials.

Abs Jour: Referat Zh.-Kh., No 8, 1957, 27699.

Author : M.M. Sherman, L.D. Nezhinskaya, M.N. Ortenberg, F.K. Gol'dshteyn.
Inst : Students' Scientific Society, Kharkov Polytechnical Institute.
Title : Drossing Method of Preparing Paste for Manufacturing Ceramic Floor
Tiles.

Orig Pub: Tr. Stud. nauch. o-va. Khar'kovsk. politekhn. in-t, 1956, 1, No 1,
61-65.

Abstract: The possibility of the application of the dross method to the preparation of paste for manufacturing tiles of the clay from the Nikoforovsk and Nikolayevsk deposits is considered. It is noted that this method could be applied in practice, should the filtration capacity of clays from the above mentioned deposits be increased. The filtration capacity of clays is increased by decrea-

Card : 1/2

-74-

USSR/Chemical Technology. Chemical Products and their Application.
Glass. Ceramics. Building Materials.

J-12

Abs Jour: Ref. Zh.-Kh., No 8, 1957, 27689

sing the viscosity of dross (heating to 50°) and the introduction of dehydrated clay into the dross composition. Besides, the possibility of shortening the duration of the wet milling of clays from 6-7 hours to 2-3 hours at the expense of introducing 1% of sulfite-alcohol vinassee into dross was established.

Card : 2/2

-75-

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001549120005-

AUTHOR: Sherman, M.S., Engineer

TITLE: A Variant of the Suspension of a High-Frequency Choking
Coil (Variant podveski vysokochastotnogo drosselya)

PERIODICAL: Energetik, 1958, Nr 5, pp 25-26 (USSR)

ABSTRACT: High-frequency choking coils, type KZ-500, are used in electric power lines in front of the circuit breakers. The suspension of these choking coils presents several problems. On 110/35 kv and 35/6 kv substations the coil can only be suspended from the wire of the line. The coil weighs 150 kg. If 2 coils are necessary the wire has to carry a weight of 300 kg. In many cases special supporting structures have to be built. If the choking coil is suspended from the wire of the power line, operating conditions are adversely affected. In Figures 1 and 2, a new method for suspending choking coils is proposed. These suspensions facilitate the operation of the power line without necessitating additional structures.
There are 2 figures.

AVAILABLE: Library of Congress

Card 1/1 1. Coils - Application

SHERMAN, M.S.

Clamp for suspension of a high-frequency choke. Energetik 8
no.6:18-19 Je '60. (MIRA 13:7)
(Electric lines--Overhead)
(Electric apparatus and appliances)

SHERMAN, M.S., inzh.

High frequency communication channels in case of partial utilization
of the conductors of electric transmission lines. Energetik 10 no.7:
20-21 Jl '62. (MIRA 15:7)

(Electric power distribution)

SHERMAN, M. YA.

PA 153T51

USSR/Engineering - Refractories
Dryers

Nov 49

"Automatization of the Tunnel Driers of the Chamotte
Shops of Krasnogorodskiy Plant imeni Lenin,"
M. Ya. Sherman, Engr, 8 pp

"Ogneupory" No 11

Cen Automatics Lab automatized block of nine driers.
Explains drying operation, and methods employed
for control of moisture, pressure, flow and
temperature of air. Another five blocks are being
automatized during 1949. Designs for serial pro-
duction of low-cost moisture regulator are under
way. Includes seven sketches.

153T51

SHERMAN, M. Ya.

PHASE I

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 9E - I

Call No.: TN 673.T6

BOOK

Author: TOPPERVERKH, N.I. and SHERMAN, M.Ya.

Full Title: THER'OTECHNICAL MEASURING AND REGULATING INSTRUMENTS IN METALLURGICAL PLANTS

Transliterated Title: Teplotekhnicheskie izmeritel'nyye i reguliruyushchie pribory na metallurgicheskikh zavodakh.

Publishing Data

Originating Agency: None

Publishing House: State Publishing House on Scientific and Technical Literature on Ferrous and Non-Ferrous Industries.

Date: 1951 No. pp.: 430 No. of copies: 7,000

Editorial Staff

Editor: L'vov, M.A.

Editor-in-Chief: None

Tech. Ed.: Vaynshteyn, E.B.

Appraiser: None

Text Data

Coverage: The book examines controlling, measuring, and regulating devices for the automatic regulation of the heating processes in metallurgical furnaces. Basic information on the assembly and layout of instruments is presented.

Purpose: A textbook for metallurgical students specializing in blast furnace, alloy, and rolled steel processes.

Facilities: Institute of Automatics and Telemechanics of the Academy of Sciences of the USSR, Central Laboratory of Automatics. Koshtyal, Yu.F., 1/2

SHER'YAN, M. Ya.

Teplotekhnicheskie izmeritel'nyye i reguliruyushchie pribory na metallurgicheskikh zavodakh

Call No.: TN 673.T6

Maslovskiy, P. M., Gudovshchikov, S. S., Zuts, K. A., Shneerov, Ya. A., Makarov, A. N., Fil'tser, G. A. and Zvenigorodskiy, B. M. received Stalin prizes for their work in introducing automatic regulation instruments into Marten and blast furnace operation.

No. of Russian or Slavic References: 22

Available: Library of Congress.

2/2

MAKAROV, A.N.; SHERMAN, M.Yu.

[Calculation of throttle valves for measurement and control] Ruschet izme-
ritel'nykh i reguliruyushchikh drossel'nykh ustroistv. Moskva, Gos. nauchno-
tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1953. 283 p.
(MIRA 6:9)
(Valves)

ARONOV, Samuil Grigor'yevich; BAUTIN, Ivan Grigor'yevich; VOLKOVA, Zoya Andreyevna; VOLOSHIN, Arkhip Il'ich; VIROZUB, Yevgeniy Vladimirovich; GABAY, Lev Izrailevich; DIDENKO, Viktor Yefimovich; ZASHKVARA, Vasilii Grigor'yevich; IVANOV, Pavel Aleksandrovich; KUSTOV, Boris Iosifovich [deceased]; KOTOV, Ivan Konstantinovich; KOTKIN, Aleksandr Matveevich; KOMANOVSKIY, Maksim Semenovich; LEYTES, Viktor Abramovich; MOROZ, Mikhail Yakovlevich; NIKOLAEV, Dmitriy Dmitriyevich; OBUKHOVSKIY Yakov Mironovich; RODSHTEYN, Pavel Moiseyevich; SAPOZHNIKOV, Yakov Yudovich; SENICHENKO, Sergey Yefimovich; TOPORKOV, Vasiliy Yakovlevich; CHERMNYKH Mikhail Sergeyevich; CHERKASSKAYA, Esfir' Ionovna, SHVARTS, Semen Aronovich; ~~SHERMAN~~, Mikhail Yakovlevich; SHVARTS, Grigoriy Aleksandrovich; LIBERMAN, S.S., redaktor izdatel'stva; ANDREYEV, S.P., tekhnicheskiy redaktor

[Producing blast furnace coke of uniform quality; a collection of articles for the dissemination of advanced practices] Poluchenie domennogo koksa postoiannogo kachestva; sbornik statei po obmenu peredovym opytom. Khar'kov, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1956. 300 p. (MLRA 9:8)
(Coke industry)

TOPERVERKH, Nikolay Isaakovich; SHERMAN, Mendel' Yakovlevich; MAKAROV, A.N.,
redaktor; CHELYUSTKIN, A.B., redaktor; MIKHAYLOVA, V.V., tekhnicheskiy
redaktor

[Thermal measuring and regulating devices in metallurgy] Teplotekhnicheskie izmeritel'nye i reguliruiushchie pribory na metallurgicheskikh zavodakh. Izd. 2-oe, perer. i dop. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1956. 606 p. (MLRA 10:1)
(Metallurgy--Apparatus and supplies)

SHERMAN, M.Ya., inzhener.

Automatic correction of consumption gauge indexes. Stal' 16 no.3:
257-259 Mr '56. (MIRA 9:7)

1.TSentral'naya laboratoriya avtomatiki.
(Gasometers and gasometry)

5(1)

SOV/112-59-3-5626

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 3, p 193 (USSR)

AUTHOR: Sherman, M. Ya.

TITLE: Automation of the By-Product Coke Industry
(Avtomatizatsiya koksokhimicheskogo proizvodstva)

PERIODICAL: V sb.: Avtomatiz. khim. i koksokhim. proiz-v. M., Metallurgizdat,
1958, pp 224-248

ABSTRACT: A review of the state of automation in the by-product coke industry
and of the objectives of complex automation of processes in the major depart-
ments of a coke-and-chemical plant is presented. Fifteen illustrations.

Bibliography: 2 items.

Card 1/1

SHERMAN, M.YA.

GS-1-5/22

AUTHORS: Virozub, I.V., Voloshin, A.I., Kezmina, V.V., and Sherman, M.Ya.

TITLE: The Control of Thermal Conditions of Coke Ovens (Regulirovaniye teplovogo rezhima koksovykh pechey)

PERIODICAL: Koks i Khimiya, 1958, No.1, pp. 17 - 24 (USSR)

ABSTRACT: Some relationships between various parameters affecting thermal conditions of coke ovens are discussed in order to indicate the basis for choosing some parameters as sources of impulses for the automatic control of the coke oven heating system. UKhIN and TSLA (Central Laboratory of Automation) proposed a system of automatic control of thermal conditions of coke ovens which secures a constant supply of heat and a constant excess of air coinciding at a constant temperature of air in the tunnel, with a constant suction at the top of the regenerators in some detail (Figs. 1 and 2). The proposed system is described in some detail (Figs. 1 and 2). It was installed on the No. 1 battery of the Zaporozhsk Coke Oven Works (Zaporozh'ye koksokhimicheskiy zavod) and operated for about two years with satisfactory results. In addition to the described method of direct control of the supply of heat, three other indirect methods were installed and operated in the Soviet Union: 1) a scheme proposed by V.G. Mosyakov. The

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The Control of Thermal Conditions of Coke Ovens.

68-1-5/22

at the top of the regenerators. This method with some modifications was used for the above described TsLA-UKhIN method. In conclusion, the authors point out that further studies of the methods used is necessary in order to choose the best elements from each method for the development of a scheme for complete automation of heating coke ovens.

There are 4 figures and 6 Slavic references.

ASSOCIATIONS: UKhIN and TsLA

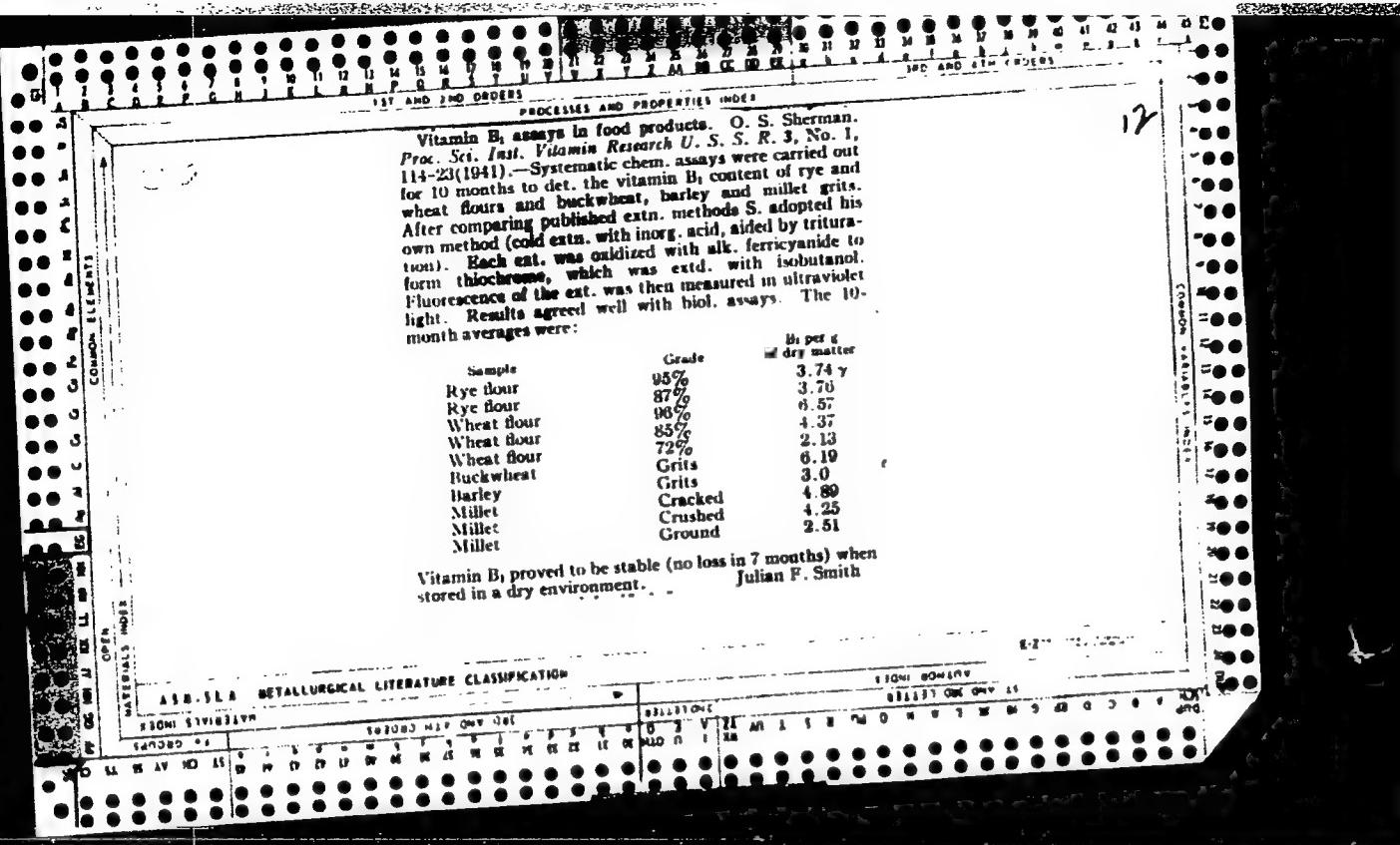
AVAILABLE: Library of Congress
Card 3/3

Making preparations of vitamin B complex, suitable for parenteral administration. S. N. Komarov and O. S. Sherman, *Proc. Natl. Inst. Vitamin Research U. S. S. R.* 37, No. 1, 98-104 (1941).—A simplified method has been developed for prep. B vitamins (chiefly B₁) from fresh brewers' yeast for parenteral administration. No exts were made with aq. alk. because of its cost; full attention was given to extn. with hot water. Flavin (I) and B₁ do not respond to the same extn. conditions. Yield of B₁ was doubled, whereas yield of I was decreased, by preanabolys of the yeast in presence of CHCl₃ at 37° or by extg the boiled yeast 24 hrs. at room temp. The optimum conditions for extg. I are pH 4, boiling time about 30 min., for B₁, pH 5-6, boiling time 2-6 min. Both I and B₁ are about 80% recovered from the aq. ext. by adsorption on gummin, a Canadian bleaching earth, at pH 3.5-4.5 in 10-30 min. Elution with satd. aq. NH₄Cl recovers about 80% of the adsorbed B₁ and is superior to the peridine method of Greene and Black (*C. A.* 31, 6302). A 2% NaOH soln. was used for elution of I. The B₁ eluate was extd. with 88% PhOH, which was then dkd. with Et₂O and extd. with H₂O in small portions. The final aq. ext. contained about 60% of the adsorbed B₁. To recover I the 2% NaOH eluate was acidified with HCl, satd. with NaCl and extd. with 88% EtOH. By fractional elution a combined eluate was finally obtained with 0.15 mg. I and 1.5 mg. B₁ per ml. Presence of all the B vitamins in this prep. was indicated by a biol. assay. J. F. Smith

Vitamin B₁ assays in food products. O. S. Sherman, Proc. Sci. Inst. Vitamin Research U. S. S. R. 3, No. 1, 114-23 (1941).—Systematic chem. assays were carried out for 10 months to det. the vitamin B₁ content of rye and wheat flours and buckwheat, barley and millet grits. After comparing published extn. methods S. adopted his own method (cold extn. with inorg. acid, aided by titration). Each ext. was oxidized with alk. ferricyanide to form thiocyanate, which was extd. with isobutanol to fluorescence of the ext. was then measured in ultraviolet light. Results agreed well with biol. assays. The 10-month averages were:

Sample	Grade	Bi per c of dry matter
Rye flour	95%	3.74 y
Rye flour	87%	3.70
Wheat flour	98%	6.57
Wheat flour	85%	4.37
Wheat flour	72%	2.13
Buckwheat	Grits	6.19
Barley	Grits	3.0
Millet	Cracked	4.89
Millet	Crushed	4.25
Millet	Ground	2.51

Millet Vitamin B₁ proved to be stable (no loss in 7 months) when stored in a dry environment. Julian F. Smith



SHERMAN, O. S.

SHERMAN, O. S. -- "Vitamin B₁-- methods of its determination, content in Food Products, and Preservation During Culinary Processing." Latvian State U, 1948
(Dissertation for the Degree of Candidate of Chemical Sciences)

SO: Izvestiya Ak. Nauk Latviyskoy SSR, No. 9, Sept., 1955

Sherman, O.S.
UNCLASSIFIED

The vitamin content of raw foods and the effect of cooking.
O. S. Sherman, Trudy Vsesoyus. *Nauch.-Issledovatel.*
Vitam. Fiziol. 7, 196-202 (1963).—Boiling potatoes, cabbage,
and carrots reduces their vitamin B₁ content 8-13%.
During boiling, frying, or braising meat loses 37-56% of
vitamin B₁. Boiling milk or eggs does not reduce their
vitamin B₁ content noticeably. Other foods lose some of
their vitamins in the various hot processes of prepa.
B. S. Levine

U S S R

2235. Colorimetric method for the determination
of Chlorine in industrial preparations. O. S.
Sherman and S. M. Kogan [Tr. Vses. N.-I. Vitaminov
Inst. 1953, 4, 230-234; Referativnyi Zh.,
Khim., 1954, Abstr. No. 45,160].—In an alkaline
medium thiocyanate (I) reacts with diazotised α -
aminoacetophenone (II) to form a coloured com-
pound, which can be measured absorptionmetrically.
I is separated from biological materials by shaking
an aqueous extract at pH 2 to 4.5 with white
Chapanatinsky clay, which adsorbs 90 to 95 per cent.
of I. The adsorbate is washed with ethanol and
ether and dried at 70° to 80° C. II is diazotised at
0° to 6° C by stirring a solution (0.169 g of II
+ 2.25 ml of HCl soln., sp. gr. 1.19, + water to
25 ml) with an equal volume of 4.5 per cent. NaNO₂
soln. for 10 min.; four times its vol. of NaNO₂ soln.
is then added to the mixture and it is set aside for

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AN/geo

O. S. Skinsack

20 min. To determine I, 0.5 ml of the diazotised soln. of II is mixed with 2 ml of a soln. containing 2 per cent. of NaOH and 2.88 per cent. of NaHCO₃, and, when the rose colour has disappeared (1 to 1.5 min.), the mixture is poured into a cylinder containing 0.1 to 0.2 g of adsorbate (3 to 25 µg of I), 1 ml of water and 3 ml of 0.5 per cent. ethanolic soln. of phenol. After mixing for 20 to 30 min., 2 ml of xylene are added and the mixture is shaken for 1.5 to 2 hr. The intensity of the colour in the xylene layer is compared with standards prepared from cryst. I, the amount of I in these standards increasing in steps of 2 µg. For polyvitamin preparations, the vitamin C is first oxidised. Five tablets are treated with 250 ml of water containing 0.5 ml of 1 per cent. HCl soln. A 1 per cent. KMnO₄ soln. is added to 25 ml of this soln. until a rose colour persists; the soln. is decolorised with 0.3 per cent. Fe₂O₃ soln., diluted to 80 ml with water and filtered. One ml of the filtrate is used for the analysis. The results agree with those obtained by the thiocchrome method.

E. HAVES

BEKESHCHUK, N., red.; OGNEV, O., red.; SHERMAN, R., red.; TURABAYEV, B.,
tekhn. red.

[Famous for their work] Proslavlenye trudom. Alma-Ata, Ka-
zakhskoe gos. izd-vo, 1960. 286 p. (MIRA 15:4)
(Kazakhstan—Agriculture)

NASONOV, Vladimir Stepanovich, kand. ekon. nauk; SHERMAN, R.,
red.; NAGIBIN, P., tekhn. red.

[A mechanized center for each state farm] Mekhanizirovaniy
nyi zernopunkt - kazhdomu sovkhozu. Alma-Ata, Kazsel'khoz-
giz, 1963. 62 p.
(MIRA 17:1)

1. V. I. Kuznetsov, Director of the Tbilisskij zavod po proizvodstvu tkanin, Tbilisskij oblast.

Letter regarding the handling of the carpentry mills on the
textile weaving machine. Textile prod. no. 10,454-1 (1960) (MIRA 1-12).

M. P. Kuznetsov, etiela Filopka Tbilisskogo nauchno-issledovatel'skogo in-ta tekstil'noj i lekkoj promyshlennosti
Gosudarstvennogo Komiteta po lekkoj promyshlennosti po
Gruzii, 34 - 75 - Razdol'skiy, L. Tbilisskij nauchno-
issledovatel'skij in-t tekstil'noj i lekkoj promyshlennosti
nozor' nauchno-tekhnicheskogo Komiteta po lekkoj promyshlennosti po
Gruzii, 34 - 75 - Chernomorskiy

S. M. L., No. 1.

Vorin, N. A. and S. Gerasim, Yu. I. "Zinc-coating of iron by
a molten zincate solution," *Investiya Kizhevsk. zelitelnika*,
Issue, "Metall", 1961 (in cover index), p. 157-58

SO: "M. I. T. (Metallurgic Log), (Lestnitsa i Zemal'nykh Stalei, no. 2), 1969"

POZDNYAKOV, Petr Mikhaylovich, kandidat biologicheskikh nauk; SHERMAN, R.N.,
redaktor; ZIOBIN, M.V., tekhnicheskiy redaktor

[Artificial insemination of sheep] Iskusstvennoe osemenenie ovets.
Alma-Ata, Kazakhskoe gos. izd-vo, 1956. 30 p. (MLRA 9:10)
(Sheep breeding)
(Artificial insemination)

TSOY, V.P., red.; SHERMAN, R., red.; NAGIBIN, P., tekhn.red.

[Sugar beets] Sakharnaia svokla. Izd. 2., dop. i perer.
Alma-Ata, Kazakhskoe gos. izd-vo, 1958. 171 p. (MIRA 12:2)
(Sugar beets)

RASHCHENKO, Ivan Nazarovich; SHERMAN, R.N., red.; OYSTRAKH, V.G.,
tekhn. red.

[Homemade cured food, preserves, and marinades] Domashnie
solen'ia, varen'ia i marinady. Alma-Ata, Kazakhskoe gos.izd-
vo, 1962. 221 p. (MIRA 16:2)

(Canning and preserving)

SAKHAROV, I.; GNEZDILOV, Yu.; SENNIK, V.; MALAKHOV, V.; SHERMAN,
R.N., red.; KUZEMBAYEVA, A., tekhn. red.

[Use of machines and tractors on collective farms] Eksplu-
atatsiia mashinno-traktornogo parka v kolkhozakh. Alma-Ata,
Kazakhskoe gos. izd-vo, 1961. 178 p. (MIRA 16:4)
(Kazakhstan--Agricultural machinery)

ROZENFEL'D, I.L.; RUBINSHTEYN, F.I.; YAKUBOVICH, S.V.; SHERMAN, R.S.;
UVAROV, A.V.

Studying the protective effect of oil paints modified with
chromic acid guanidine. Lakokras.mat.i ikh prim. no.6:11-15
'62. (MIRA 16:1)

(Protective coatings) (Guanidine)

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CIA-RDP86-00513R001549120005-4

SHERMAN, R. Z., AND YE. KH. GANYUSHINA

"Syvorotochnaya bolezn' (Serum Sickness), Biomedgiz, 1936

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1a

16

Blood cholesterol in malarial children. R. Z. Sherman
Pediatrics 1940, No. 6, 389. Studies on 31 patients up
to 12 yrs. of age, showed that before therapy, during
apresia, the cholesterol (1) content of blood was 150-180
mg. % in 8 cases and 30-130 mg. % in 20 cases. At the
onset of fever the av. level was 107.4 mg. %. On treat-
ment with aaccine the level was normal in 10 cases, 130
150 mg. % in 6 cases and 190-210 mg. % in 3 cases. In 15
cases the level remained low (70-130 mg. %) after treat-
ment. Hypcholesterolemia is not always an indicator of
the gravity of the disease. E. Lazarus

AT&T SCA METALLURGICAL LITERATURE CLASSIFICATION

pa

1/G

Bilirubinemia in malarial children. R. Z. Sherman
Pediatrics 1940, No. 6, 39-40. - Conclusions based on 112
detns. in 57 children: On the assumption that the normal
bilirubin content (I) of blood is 0.2-0.6 mg. %, the I is
higher before therapy, during apyrexia and at the onset of
an attack. On therapy with *acridine*, with or without
plasmocide, the I decreases but does not descend to nor-
mal. The degree of bilirubinemia during an attack de-
pends on the gravity of the latter. On completion of
therapy, in relapsing cases, the I remains high. The detn.
of I during malaria is valuable for prognostic purposes.
T. Lazarus

DATA SHEET
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ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

PA 46/49T76

SHERMAN, R.Z.

USSR/Medicine - Malaria, Therapy
Medicine - Pediatrics

Mar 49

"Particulars of the Clinical Aspects and Treatment of Malaria in Children," R. Z. Sherman, Clinic, Pediatrics Faculty, Second Moscow Med Inst imeni I. V. Stalin, 2 pp

"Sov Med" No 3

X Incidence of malaria in USSR in 1948 was [redacted] to one fourth of the 1935 figure. Summarizes speech on 1948 results and 1949 plans by Prof I. I. Razozin, chief, Main Sanitary Antiepidemic Administration.

46/49T76

SHERMAN, R. Z., DR M D SCI

USSR/Medicine - Antibiotics

Jun 51

"Treatment of Bacillary Dysentery of Children With Synthomycin," R. Z. Sherman, Dr Med Sci, Ye. V. Prokhorovich, Laureate Stalin Prize, S. A. Mirkin, Moscow, Children's Clinical Hosp, Moscow

"Klin Med" Vol XXIX, No 6, pp 26-32

Synthomycin (synthesized in 1949 at Lab of Exptl Chemotherapy of Infectious Diseases, All-Union Sci Res Chem Phar Inst Iment S. Ordzhonikidze) is very effective in dysentery of young children which cannot be treated with serum, bacteriophage, or sulfa drugs. (The bacteria develop resistance to sulfa drugs.) Toxicosis is rapidly eliminated by treatment 198T52

USSR/Medicine - Antibiotics (Contd)

Jun 51

with synthomycin, so that a normal diet can be restored. When there is retching, the drug can be administered rectally. Subcutaneous injection is not essential.

198T52

YERMOL'YEVA, Z.V.; SHERMAN, R.Z.; RAVICH, B.V.; YAKIMOVA, M.P.

Results of the treatment of dysentery with streptomycin associated with ecmoline. Klin. med., Moskva 31 no.2:26-30 Feb 1953. (CIML 24:3)

1. Professor, Doctor Medical Sciences for Sherman; Candidate Biological Sciences for Ravich. 2. Moscow.

SHERMAN, R.Z., doktor meditsinskikh nauk (Moskva); TATARINOVA, S.D.(Moskva);
YAKIMOVA, M.P.. (Moskva)

Results of treating chronic dysentery in children with synthomycin
and streptomycin with ecmoline. Klin.med. 34 no.7:90 Jl '56.

(MLRA 9:10)

1. Iz kafedry mikrobiologii (zav. - chlen-korrespondent AMN SSSR
prof. Z.V.Yermol'yeva) TSentral'nogo instituta usovershenstvovaniya
vrachey (dir. V.F.Lebedeva) i yasley Moskvoretskogo rayona (zav.
M.P.Yakimova)

(DYSENTERY) (ANTIBIOTICS)

SHEVYAKOVA, O.I.; SHERMAN, R.Z.; TATARINOVA, S.D.

Oxytetracycline and bacteriophage therapy of dysentery in children.
Antibiotiki 3 no.6:99-102 N-D '58. (MIRA 12:2)

1. Kafedra mikrobiologii (zav. - chlen-korrespondent AMN SSSR prof. Z.V. Yermol'yeva) TSentral'nogo instituta usovershenstvovaniya vrachey i gorodskiy detskiye bol'nitay No.6 (glavnnyy vrach D.G. Naumova) i No.24 (glavnnyy vrach Ye.Z. Katkova).

(DYSENTERY, BACILLARY, in inf. & ther.

ther., bacteriophage & oxytetracycline (Rus))

(OXYTETRACYCLINE, ther. use,

dysentery in child., with bacteriophage (Rus))

(BACTERIOPHAGE, ther. use,

dysentery in child., with oxytetracycline (Rus))

SHEVYAKOVA, O.I.; SHERMAN, R.Z.; TATARINOVA, S.D.

Use of a combination of levomycetin and bacteriophage in dysenterial infection in children. Antibiotiki 6 no.3:241-243 Mr '61.

(MIRA 14:5)

1. Kafedra mikrobiologii (zav. - chlen-korrespondent AMN SSSR prof. Z.V.Yermol'yeva) TSentral'nogo instituta usovershenstvovaniya vrachey i 6-ya Gorodskaya detskaya bol'nitsa (glavnnyy vrach D.G.Naumova).
(CHLOROMYCETIN) (BACTERIOPHAGE)
(DYSENTERY)

SIBERIAI, A.A.; SEVLENKOVA, O.I.; TATARINOV, S.D.

Treatment of dysentery in children with tetracycline together with
a bacteriophage. Sov.med. 25 no.7:91-95 Jl '61. (EL. A 15:1)

1. Iz kafedry mikrobiologii (zav. - chlen-korrespondent AMN SSSR
prof. Z.V. Yermol'yeva) TSentral'nogo instituta usovershenstvovaniya
vrachey (dir. M.D. Kovrigina) i 6-y Gorodskoy detskoy bol'nitsy
(glavnnyy vrach D.G. Naumova)
(BACTERIOPHAGE) * (TETRACYCLINE) (DYSENTERY)

SHERMAN, R.Z.; SHEVYAKOVA, O.I.; TATARINOVA, S.D.

Antibiotics in pediatrics (dysentery, coli-enteritis, pneumonia)
Antibiotiki 7 no.8:749-757 Ag '62. (MIRA 15:9)

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AGABABOVA-SKOBELEVA, V.V., kand. med. nauk; DOBROKHOTOVA, A.I., prof. [deceased]; ZHUKOVSKIY, M.A., kand. med. nauk; LEBEDEV, D.D., zasl. deyatel' nauki prof.; MARTINSON, Kh.S., kand. med. nauk; MOLCHANOV, V.I., prof.; NCSOV, S.D., prof.; SCBOLEVA, V.D., doktor med. nauk; SOLOV'YEV, V.D., prof.; SUKHAREVA, M.Ye., prof.; SHAPIRO, S.L., kand. med. nauk; SHERMAN, R.Z., doktor med. nauk; SHIRVINDT, B.G., prof.; DOMBROVSKAYA, Yu.F., otv. red.; POTAPOVA, I.N., red.; BEL'CHIKOVA, Yu.S., tekhn. red.

[Multivolume manual on pediatrics] Mnogotomnoe rukovodstvo po pediatrii. Moskva, Medgiz. Vol.5. [Infectious diseases in children; aerial and droplet infections] Infektsionnye bolezni v detskom vozraste; vozдушно-капельные инфекции. Red. toma S.D.Nosov. 1963. 547 p. (MIRA 16:6)

1. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Skobeleva, Solov'yev). 2. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Dombrovskaya).

(PEDIATRICS) (COMMUNICABLE DISEASES)

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SHERMAN, R.Z.; SHEVYAKOVA, O.I.; TATARINOVA, S.D.; SHUMOVA, B.I.;
GOL'TSEKER, A.I.; KOLESNIKOVA, Yu.S.

Bacteriophage and tetracycline in the prevention of dysentery
among contact children. Antibiotiki 10 no. 10:948-952
(MIRA 18:12)
O '65.

1. Kafedra mikrobiologii (zav. - deystvitel'nyy chlen AMN SSSR
prof. Z.V. Yermol'yeva) TSentral'nogo instituta usovershenstvo-
vaniya vrachey i Sanitarno-epidemiologicheskoy stantsii (glavnyy
vrach I.F. Krasavin) Kiyevskogo rayona, Moskva. Submitted
Dec. 13, 1963.

S/0057/64/034/002/0313/0320

ACCESSION NR: AP4013420

AUTHOR: Abrosimon, N.K.; Kaminker, D.M.; Petrov, I.A.; Sherman, S.G.

TITLE: On the theory of a duct consisting of magnetic quadrupole lenses for obtaining pure beams of μ -mesons of various energies

SOURCE: Zhurnal tekhn.fiz., v.34, no.2, 1964, 313-320

TOPIC TAGS: meson, μ -meson, π -meson, μ -meson duct, magnetic lens, quadrupole magnetic lens, magnetic lens system, momentum selector

ABSTRACT: The theory of the so-called μ -meson duct is discussed (A.Citron a. H. Overas. Report CERN sc.,143,1961; E.Braunersreuther, V.Chabaud, C.Delorme and M. Morugo, Report CERN 61-12,1961). The duct consists of a sequence of identical and equally spaced magnetic quadrupole lenses so oriented that the successive convergence planes are perpendicular to each other, and is intended for obtaining a beam of μ -mesons from the decay in flight of π -mesons. Previous theoretical treatments have restricted the discussion to the case of thin lenses. The results of the present paper are valid for lenses of arbitrary thickness (length). The equation of

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SHERMAN S.G.
MATUSEVICH, I.Z.; SHERMAN, S.G.

Expert diagnosis of working disability in peptic ulcer in the
post-war period. Sovet.vrach.sborn. no.17:30-33 s '49.(CLML 19:2)

1. Clinic of the Leningrad Institute for Determination of Working
Capacity and for Rehabilitation of Invalids.

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CIA-RDP86-00513R001549120005-4"

SHERMAN, S. G.; SOBOLEVA, A. V.; VELIKSON, I. M.; MAKHLINA, V. B.

Lungs - Diseases

Clinico-functional method of determination of the state of respiratory insufficiency in chronic non-tuberculous pulmonary diseases. Klin. med. 30 no. 4, 1952.

Monthly List of Russian Accessions, Library of Congress, September 1952. UNCLASSIFIED.

SHERMAN, S.G.

SHERMAN, S.G.; FAYNSHTEYN, S.S.

Organization of the employment of pulmonary tuberculosis patients.
(MIRA 8:4)
Probl.tub. no.1:9-13 Ja-F '55.

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta ekspertizy
trudosposobnosti i trudoustroystva invalidov.
(TUBERCULOSIS, PULMONARY, economics,
employment)
(INDUSTRY AND OCCUPATIONS,
employment in pulm. tuberc.)

CHAYKA, V.V., doktor med.nauk; SHERMAN, S.G., starshiy nauchnyy sotrudnik

Functional evaluation of a system of respiration in tuberculosis
patients working in cotton thread spinning plants. Vrach.delo no.5:
(MIRA 12:12)
541 My '59.

1. Leningradskiy nauchno-issledovatel'skiy institut tuberkuleza.
(RESPIRATION) (TUBERCULOSIS)